AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (withdrawn) A transistor for active matrix display comprising a microcrystalline silicon film (5) and an insulator (3), the crystalline fraction being above 80%, wherein it comprises a plasma treated interface (4) located between the insulator (3) and the microcrystalline silicon film (5) so that the said transistor (1) has a linear mobility equal or superior to 1.5 cm2W1s~1, shows threshold voltage stability and wherein the microcrystalline silicon film (5) comprises grains (6) whose size ranges between 10 nm and 400 nm.

2. (withdrawn) A transistor for active matrix display according to claim 1, wherein said grain size ranges between 100 nm and 200 nm.

3. (withdrawn) A transistor for active matrix display according to claim 1, wherein the microcrystalline silicon film (5) thickness is comprised between 100 nm and 450 nm.

4. (withdrawn) A transistor for active matrix display according to claim 1, wherein said transistor (1) has a top-gate electrode.

5. (withdrawn) A transistor for active matrix display according to claim 1 wherein said transistor (1) has a bottom-gate electrode.

6. (withdrawn) A display unit having a line-column matrix of pixels that are actively addressed, wherein each pixel comprises at least a transistor (1) according to claim 1.

7. (withdrawn) A display unit according to claim 6, wherein said pixels comprise light emissive organic materials.

8. (withdrawn) A display unit according to claim 6, wherein said pixels comprise liquid crystals.

9. (withdrawn) A display unit according to claim 6, wherein said pixels comprise light emissive polymer materials.

10. (withdrawn) A display unit according to claim 6, wherein electronic control means to drive each pixel are at least

partially integrated on the corresponding microcrystalline silicon film.

11.(currently amended) A method for producing a transistor for active matrix display comprising the steps of:

forming an active material and electrodes [[(2)]], said active material being formed using vapor deposition methods and said transistor [[(1)]] comprising an insulator [[(3)]], wherein,

~~forming~~ a plasma treated interface [[(4)]] is formed on top of said insulator [[(3)]], and

~~forming~~ a microcrystalline film [[(5)]] is formed on top of said treated interface [[(4)]] at a temperature comprised between 100 and 400°C using at least a deposition chemical element and a crystallisation chemical element wherein the said crystalline fraction being above 80% and said microcrystalline silicon film [[(5)]] comprises grains ~~(6) where size ranges~~ of a size between 10 nm and 400 nm.

12. (currently amended) [[A]] The method for producing a transistor according to claim 11, wherein said plasma treated interface [[(4)]] is selected from the group consisting of a SiNx layer, a SiNxOy layer, a Si02 layer and glass.

13. (currently amended) [[A]] <u>The</u> method for producing a transistor according to claim 12, wherein ~~one forms~~ the plasma treated interface [[(4)]] <u>is formed</u> using a gas selected from the group consisting of N2, 02, N20 and NH3.

14. (currently amended) [[A]] <u>The</u> method for producing a transistor according to claim 11, wherein the microcrystalline silicon film [[(5)]] is formed using a buffer gas selected from the group consisting of Ar, Xe, Kr and He.

15. (currently amended) [[A]] <u>The</u> method for producing a transistor according to claim 11, wherein said crystallisation chemical elements is H2.

16. (currently amended) [[A]] <u>The</u> method for producing a transistor according to claim 11, wherein said deposition chemical elements are selected ~~among the group comprising~~ <u>from the group consisting of</u> SiH4 [[,]] <u>and</u> SiF4.

17. (currently amended) [[A]] <u>The</u> method for producing a transistor according to claim 11, wherein said deposition chemical elements flux and said crystallisation chemical elements flux are at equilibrium during the growth of the microcrystalline silicon film.

18. (currently amended) [[A]] <u>The</u> method for producing a transistor according to claim 11, wherein one forms a top gate transistor.

19. (currently amended) [[A]] <u>The</u> method for producing a transistor according to claim 18, wherein one patterns the substrate comprising a metallic layer to form source and drain electrodes.

20. (withdrawn) A method for producing a transistor according to claim 11, wherein one forms a bottom gate transistor.

21. (withdrawn) A method for producing a transistor according to claim 20, wherein the substrate comprises a gate electrode.

22. (currently amended) [[A]] <u>The</u> method for producing a transistor according to claim 11, wherein the microcrystalline silicon film [[(5)]] comprises grains [[(6)]] ~~whose size ranges~~ <u>of a size</u> between 10 nm and 400 nm.

23. (currently amended) [[A]] <u>The</u> method for producing a transistor according to claim 11, wherein the microcrystalline

silicon film [[(5)]] thickness is comprised between 100 nm and 450 nm.

24. (currently amended) [[A]] The A method for producing a transistor according to claim 11, wherein the microcrystalline silicon film [[(5)]] is produced by hot wire technique.

25. (currently amended) [[A]] The method for producing a transistor according to claim 11, wherein the microscrystalline silicon film [[(5)]] is produced by radiofrequency, glow discharge technique.

26. (currently amended) [[A]] The method for producing a transistor according to claim 11, wherein the vapor deposition methods use radiofrequency glow discharge technique.

27. (currently amended) [[A]] The method for producing a transistor according to claim 26, wherein ~~one~~ the vapor deposition methods uses a 13.56 MHz PECVD reactor.